Report on

"New stabilization criteria for time-delayed bimodal piecewise linear systems"

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The authors examine the stability and stabilization of time-delayed bimodal piecewise linear systems using smooth Lyapunov-Krasovskii functionals. The primary contributions are: (1) a novel stability criterion based on the proposed smooth Lyapunov-Krasovskii functional is introduced to ensure asymptotic stability in the case of zero inputs, and (2) a new condition is presented for designing linear state feedback controllers to stabilize the system. Lastly, several numerical examples demonstrate the effectiveness of the proposed methods.

All the proofs seem to be correct. The presentation is clear. A carefully revised version of this paper can be recommended for publication in Quy Nhon University Journal of Science with only minor checks required.

Detailed comments and suggestions:

• Page 1, line 5: "two folds" → "twofold".

• Page 1, line 8: "than before in the literature" → "than those previously reported in the literature".

• Page 1, paragraph 2, line -5: "is also using" → "also uses".

• Page 1, paragraph 2, line -1: "i.e Carathodory solutions" → "i.e., Carathodory solutions".

• Page 2, paragraph 1, line 10: "there is a few papers" → " there are only a few papers".

• Page 2, paragraph 1, line 25: "The symbol $\mathbb{R}$ is " → "Denote by $\mathbb{R}$".

• Page 2, paragraph 2, line 16: "are followed from" → "follow from".

• Page 2, paragraph 2, line 26: "i.e." → "i.e.,".

• Page 3, paragraph 2: Give a proof for Lemma 1.

• Page 7, paragraph 2: Fig. 3 seems to be taken from another work. It should be redone if the figure does not originally belong to the authors.

• Page 7, paragraph 2, line -10: "**Example 2** ([13])" → "**Example 2** [13]".